TRAUMA - PEDIATRIC
(Less Than 15 Years of Age)

Any critical trauma patient (CTP) requires effective communication and rapid transportation to the closest trauma center. If not contacted at scene, the receiving trauma center must be notified as soon as possible in order to activate the trauma team.

In Inyo and Mono Counties do not have trauma center designations and the assigned base station should be contacted for determination of appropriate destination.

FIELD ASSESSMENT/TREATMENT INDICATORS

Trauma Triage Criteria and Destination Policy #15030

PEDIATRIC TREATMENT PROTOCOL: TRAUMA

Base Station Contact Shaded in Gray

BLS INTERVENTIONS	ALS INTERVENTIONS
• Ensure thorough initial assessment • Ensure patient airway, protecting cervical spine • Axial spinal stabilization as appropriate • Oxygen and/or ventilate as needed, O_2 saturation (if BLS equipped) • Keep patient warm and reassure • For a traumatic full arrest, an AED may be utilized, if indicated • Transport to ALS intercept or to the closest receiving hospital	• Advanced airway as indicated. *Unmanageable Airway:* -If an adequate airway cannot be maintained with a BVM device; **AND** -The paramedic is unable to intubate or if indicated, perform a successful needle cricothyrotomy, **Then**, transport to the closest receiving hospital and follow Continuation of Trauma Care Protocol Reference #8100. • Monitor ECG • IV/IO Access: Warm IV fluids when avail *Unstable:* -Vital signs (age appropriate) and/or signs of inadequate tissue perfusion, start 2nd IV access. -Administer 20ml/kg NS bolus IV/IO, may repeat once.

BLS Continued	***ALS Continued***
	Stable: -Vital signs (age appropriate) and/or signs of adequate tissue perfusion. -*Maintain* IV NS rate at TKO. • Transport to trauma hospital: PEDS patients identified as CTP will be transported to a pediatric trauma hospital when there is less than a 20 minute difference in transport time to the pediatric trauma hospital versus the closest trauma hospital. • Insert nasogastric/orogastric tube as indicated
MANAGE SPECIAL CONSIDERATIONS:	**MANAGE SPECIAL CONSIDERATIONS:**
Abdominal Trauma: Cover eviscerated organs with saline dampened gauze. Do not attempt to replace organs into the abdominal cavity. **Amputations**: Control bleeding. Rinse amputated part gently with sterile irrigation saline to remove loose debris/gross contamination. Place amputated part in dry, sterile gauze and in a plastic bag surrounded by ice (if available). Prevent direct contact with ice. Document in the narrative who the amputated part was given to. • **Partial amputation**: Splint in anatomic position and elevate the extremity.	
Blunt Chest Trauma: If a wound is present, cover it with an occlusive dressing. If the patient's ventilations are being assisted, dress wound loosely, (do not seal). Continuously re-evaluate patient for the development of tension pneumothorax. **Flail Chest**: Stabilize chest, observe for tension pneumothorax. Consider assisted ventilations.	**Blunt Chest Trauma:** Perform needle thoracostomy for chest trauma with symptomatic respiratory distress.

BLS Continued

Fractures: Immobilize above and below the injury. Apply splint to injury in position found except:

- **Femur**: Apply traction splint if indicated.
- **Grossly angulated long bone with distal neurovascular compromise:** Apply gentle unidirectional traction to improve circulation.
- **Check and document distal pulse before and after positioning**.

Genital Injuries: Cover genitalia with saline soaked gauze. If necessary, apply direct pressure to control bleeding. Treat amputations the same as extremity amputations.

ALS Continued

Fractures:

Isolated Extremity Trauma: Trauma without multisystem mechanism.

Extremity trauma is defined as those cases of injury where the limb itself and/or the appendicular skeleton (shoulder or pelvic girdle) may be injured – e.g. dislocated shoulder, hip fracture or dislocation.

IV Pain Relief:

-Morphine Sulfate 0.1mg/kg IV/IO slowly, do not exceed 5mg increments, may repeat every 5 minutes to a maximum of 20mg IV/IO when the patient maintains age appropriate vital signs and adequate tissue perfusion.

-Documents vital signs every 5 minutes while medicating pain and reassess the patient.

-For patients 4 years old and older, consider Ondansetron 4mg slow IVP/PO as prophylactic treatment of nausea and vomiting associated with narcotic administration.

-Administer 20ml/kg NS bolus IV/IO one time.

NOTE: *Patients in high altitudes should be hydrated with IV NS prior to IV pain relief to reduce the incidents of nausea, vomiting, and transient hypotension, which are side effects associated with administering IV Morphine.*

IM Pain Relief: Morphine Sulfate 0.2mg/kg IM, 10mg IM maximum. Document vital signs and reassess the patient.

-For patients 4 years old and older, consider Ondansetron 4mg slow IM/PO as prophylactic treatment of nausea and vomiting associated with narcotic administration.

BLS Continued	***ALS Continued***
Head and Neck Trauma: Place brain injured patients in reverse Trendelenburg (elevate the head of the backboard 15-20 degrees), if the patient exhibits no signs of shock.	**Head and Neck Trauma:** Immediately prior to intubation, consider prophylactic Lidocaine 1.5 mg/kg IV for suspected head/brain injury.
• **Eye**: Whenever possible protect an injured eye with a rigid dressing, cup or eye shield. Do not attempt to replace a partially torn globe – stabilize it in place with sterile saline soaked gauze. Cover uninjured eye. • **Avulsed Tooth**: Collect teeth, place in moist, sterile saline gauze and place in a plastic bag.	• Base Station Orders: -When considering nasotracheal intubation (≥15 years of age) and significant facial trauma, trauma to the face or nose and/or possible basilar skull fracture are present, trauma base hospital contact is required.
Impaled Object: Immobilize and leave in place. Remove object if it interferes with CPR, or if the object is impaled in the face, cheek or neck and is compromising ventilations.	-**Impaled Object:** Remove object upon trauma base physician order, if indicated.
Pediatric Patients: If the level of the patient's head is greater that that of the torso, use approved pediatric spine board with a head drop or arrange padding on the board so that the ears line up with the shoulders and keep the entire lower spine and pelvis in line with the cervical spine and parallel to the board.	
Traumatic Arrest: CPR if indicated. May utilize an AED if indicated.	**Traumatic Arrest**: Continue CPR as appropriate. • Treat per Protocol # 14040 Pediatric Cardiac Arrest.
Determination of Death on Scene: Refer to Protocol # 12010 Determination of Death on Scene.	**Determination of Death on Scene**: Refer to Protocol # 12010 Determination of Death on Scene.

ALS Continued

Severe Blunt Force Trauma Arrest:
-IF INDICATED: transport to the closest receiving hospital.

Penetrating Trauma Arrest:
-IF INDICATED: transport to the closest receiving hospital.

- If the patient does not meet the "Obvious Death Criteria" in the "*Determination of Death on Scene" Protocol #12010*, contact the trauma base station for determination of death on scene for those patients who suffer a traumatic cardiac arrest in the setting of penetrating trauma with documented asystole in at least two (2) leads, and no reported vital signs (palpable pulse and/or spontaneous respirations) during the EMS encounter with the patient.

- Resuscitation efforts on a penetrating traumatic arrest victim are not to be terminated without trauma base station contact.

Precautions and Comments:
- Electrical injuries that result in cardiac arrest shall be treated as medical arrests.
- Confirm low blood sugar in children and treat as indicated with altered level of consciousness.
- Suspect child maltreatment when physical findings are inconsistent with the history. Remember reporting requirements for suspected child maltreatment.
- **Unsafe scene may warrant transport despite low potential for survival**.
- Whenever possible, consider minimal disturbance of a potential crime scene.

Base Station Orders: May order additional:
- medications;
- fluid boluses.

REFERENCE PROTOCOLS

Protocol Number	Protocol Name
8100	Continuation of Trauma Care
9010	General Patient Care Guidelines
10150	External Jugular Vein Access
10030/10040	Oral Endotracheal Intubation
10080	Insertion of Nasogastric/Orogastric Tube
10060	Needle Thoracostomy
10140	Intraosseous Infusion IO
10050	Nasotracheal Intubation
10070	Needle Cricothyrotomy
10160	Axial Spinal Stabilization
10010/10020	King Airway Device
14040	Pediatric Cardiac Arrest
15030	Trauma Triage Criteria and Destination Policy
12010	Determination of Death on Scene